IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Hisayuki FURUSE

Title:

ELECTRIC ROTATING MACHINE

AND MANUFACTURING

METHOD THEREOF

Appl. No.:

09/678,311

Filing Date: October 3, 2000

Examiner:

Thanh Lam

Art Unit:

2834

REPLY

Commissioner for Patents **Box: AFTER FINAL** Washington, D.C. 20231

Sir:

In reply to the Final Office Action mailed on July 30, 2002, please reconsider the above referenced application for the following reasons:

REMARKS

Claims 3 and 6-9 were pending in the application. Claims 7-9 have been withdrawn from consideration by the Examiner. No claims have been canceled or amended by way of this Reply. Thus, claims 3 and 6 are submitted for reconsideration at this time.

Rejection Under 35 U.S.C. § 103(a)

Claims 3 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,793,136 ("Redzic" hereafter) in view of U.S. Patent No. 3,597,646 ("Lawrenson" hereafter). Applicant traverses the aforementioned rejection as indicated below.

The Office Action acknowledges that Redzic fails to disclose or suggest that the middle core comprises plural plates stacked in an axial direction and joined to a first fixing member by a connecting member. The Office Action asserts, however, that Lawrenson discloses plural plates stacked in an axial direction joined to a first fixing member (57) by a connecting member (52), and that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the middle core of Redzic to accommodate the core with plates as taught by <u>U.S. Patent No. 6,114,784 ("Nakano" hereafter)</u> in order to provide the core with ease of assembly.

Applicant first notes that Nakano is not available as prior art under §103. Specifically, Nakano and the subject application were, at the time the invention was made, both owned by assignee Nissan. Hence, 35 U.S.C. §103(c) disqualifies Nakano as prior art for rejections under §103. Thus, the motivation recited in the Office Action for combining Redzic with Lawrenson is improper. Applicant respectfully requests that the Examiner clarify his motivation for combining the references if Nakano was cited in error.

Applicant further notes that Lawrenson fails to disclose or suggest that the space through which a bolt passes is formed between adjacent split cores as expressly claimed. As previously explained in Applicant's June 6, 2002 Amendment & Reply, the rotor core (2) of Lawrenson is formed by four segments (3) of magnetic material (col. 2, lines 53-55). All of the stampings have holes 51 through which axial bolts 52 extend and these bolts pass through matching holes 53 in nonmagnetic stainless steel end plates 59 after which they are secured by nuts 54 so that the set of four stacks of stampings are firmly held between end plates 59 (col. 5, lines 56-61).

There are essentially only two ways to potentially achieve "adjacent" split cores in Lawrenson. Neither of these two ways, however, has a hole 51 through which axial bolts 52 extend. As shown in FIG. 8, two adjacent cores could be a first horizontal plate stacked flush on a second horizontal plate in one of the four segments (3) of magnetic material. However, the hole 51 which passes down through the stack is not "between" a first horizontal plate stacked on a second horizontal plate; it penetrates vertically through them. In other words, if the hole 51 was between a first horizontal plate and a second horizontal plate in a given stack, the hole 51 would have to be sideways (i.e., horizontal) and the bolt wouldn't penetrate vertically down the stack at all. Moreover, two plates stacked on top of one another are not part of two adjacent split cores, they are part of the same core. Hence, the aforementioned configuration does not disclose or suggest that the space through which a bolt passes is formed between adjacent split cores as claimed.

Alternatively, as shown in FIG. 1 of Lawrenson, two adjacent cores could be a first horizontal plate in one stack and a second horizontal plate in a second stack adjacent to the first stack, the first horizontal plate and the second horizontal plate being in the same horizontal plane. Hole 51, however, is formed within each stack;

i.e., it isn't between adjacent stacks and thus is not between adjacent split cores as claimed. Gap 4 cannot be the space between adjacent split cores as claimed, because axial bolts 52 do not pass through the gap 4, they pass through holes 51 within each stack. Hence, the aforementioned configuration also fails to disclose or suggest that the space through which a bolt passes is formed between adjacent split cores as claimed.

Applicant directs the Examiner's attention to FIG. 7 of the present application and the corresponding description on page 6, lines 22-24 of the as filed specification, which describes a thin-plate 23A including a plurality of I-shaped split cores 23B in the same horizontal plane. As shown, the plurality of I-shaped split cores 23B are configured to have a space 23C between adjacent I-shaped split cores 23B, such that a bolt 28 passes down through the space 23C between stacks of the I-shaped split cores 23B (FIG. 9). This feature is not disclosed or suggested by the cited art.

Thus, as Lawrenson fails to disclose or suggest a space through which the bolt passes that is formed between adjacent split cores, even as combined by the Office Action, the cited art fails to disclose or suggest the claimed invention. Withdrawal of the rejection of claims 3 and 6 under 35 U.S.C. §103(a) is respectfully solicited.

Conclusion

Applicant believes that the present application is now in condition for Favorable reconsideration of the application as amended is respectfully allowance. requested.

Respectfully submitted,

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